



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

**[Docket No. FAA-2013-0487; Directorate Identifier 2010-SW-056-AD;
Amendment 39-17666; AD 2013-23-11]**

RIN 2120-AA64

Airworthiness Directives; Eurocopter France Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for Eurocopter France (Eurocopter) Model AS332L2 and EC225LP helicopters. This AD requires inspecting the torque value of the bolts that secure the front and rear main gearbox (MGB) suspension bar attaching fittings, and re-torquing the bolts to the proper value if the torque value is out of tolerance. This AD also requires, if the torque value is out of tolerance by more than 20 percent, inspecting the bolts, frames, and related equipment for a crack and repairing or replacing them if cracked. This AD was prompted by reports of cracks on Frame 5295 of Model AS332L2 helicopters. The actions of this AD are intended to detect the torque loss of the bolts that secure the MGB bar attaching fittings and to prevent cracks that could lead to failure of the MGB supporting structure, detachment of the MGB, and loss of helicopter control.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain documents listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this AD, contact American Eurocopter Corporation, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.eurocopter.com/techpub>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the foreign authority's AD, any incorporated-by-reference service information, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations Office, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Gary Roach, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email gary.b.roach@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

On June 7, 2013, at 78 FR 34288, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 to include an AD that would apply to Eurocopter Model AS332L2 and EC225LP helicopters. The NPRM proposed to require inspecting the torque value of the bolts that secure the front and rear MGB suspension bar attaching fittings, and re-torquing the bolts to the proper value if the torque value is out of tolerance. The NPRM also proposed to require that if the torque value is out of tolerance by more than 20 percent, inspecting the bolts, frames, and related equipment for a crack and repairing or replacing them if cracked. The proposed requirements were intended to detect the torque loss of the bolts that secure the MGB bar attaching fittings and to prevent cracks that could lead to failure of the MGB supporting structure, detachment of the MGB, and loss of helicopter control.

The NPRM was prompted by AD No. 2006-0163 R1, dated December 13, 2007 (AD No. 2006-0163R1), issued by the European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, to correct an unsafe condition in Model AS 332 L2 and Model EC 225 LP helicopters. According to EASA, analysis of tightening torques revealed some cases of tightening torque loss, which can lead to the formation of a crack at the MGB bar attaching fittings. As a result, EASA AD No. 2006-0163R1 requires checking the bolts securing the front and rear of the MGB bar attaching fittings for tightening torque loss and, if the loss is equal to or greater than 20 percent, readjusting the torque and checking the four bolts securing the MGB bar attaching fitting mounting plate, as well as the frame 3855, for a crack. If there

is a crack in at least one of the bolts, AD No. 2006-0163R1 requires replacing all four bolts. If there is a crack in frame 3855, AD No. 2006-0163R1 requires suspending all flights and contacting the manufacturer for corrective action.

Comments

We gave the public the opportunity to participate in developing this AD, but we received no comments on the NPRM (78 FR 34288, June 7, 2013).

FAA's Determination

These helicopters have been approved by the aviation authority of France and are approved for operation in the United States. Pursuant to our bilateral agreement with France, EASA, its technical representative, has notified us of the unsafe condition described in the EASA AD. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed.

Differences Between this AD and the EASA AD

This AD differs from the EASA AD in that we use the word “inspect” to describe actions required by a mechanic versus the word “check,” which is how we describe actions allowed by a pilot. We also require that if you find a crack in a frame or fitting, you repair or replace the cracked part instead of contacting the manufacturer. Also, we have different compliance times for the initial inspection for the tightening torque of the bolts that secure the MGB attaching fitting.

Related Service Information

We reviewed Eurocopter Alert Service Bulletin (ASB) No. 05.00.65, Revision 0, dated March 28, 2006, for Model AS332L2 helicopters, and ASB No. 05A002, Revision 1, dated December 6, 2007, for Model EC225LP helicopters. The ASBs specify inspecting the tightening torque of the bolts that secure the front and rear of the MGB bar attaching fittings. If more than a 20 percent tightening torque load loss is discovered, the ASBs require inspecting the frames 3855 and 5295 for a crack in the area of the MGB bar attaching fittings. EASA classified these ASBs as mandatory and issued EASA AD No. 2006-0163 R1 to ensure the continued airworthiness of these helicopters.

Costs of Compliance

We estimate that this AD affects 4 helicopters of U.S. Registry and that labor costs average \$85 a work-hour. Based on these estimates, we expect the following costs:

- Inspecting the torque of each bolt that secures the front and rear MGB attaching fitting requires 1 work-hour and no parts for a total cost of \$85 per helicopter, and \$340 for the U.S. fleet.
- Readjusting the torque adds another 0.25 work-hour for a total cost of about \$21 per helicopter.
- Replacing all four nuts and bolts of an attachment fitting requires 4 work-hours. Parts cost \$1,000 for a total cost of \$1,340 per helicopter.
- Replacing the attachment fitting or plate requires 16 work-hours respectively. Parts cost \$2,000 respectively for a total cost of \$3,360 to replace each part per helicopter.

- Replacing frames 3855 and 5295 require 40 work-hours respectively. Parts cost \$5,000 to replace each frame for a total cost of \$8,400 per frame per helicopter.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on helicopters identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866;
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);

(3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2013-23-11 **EUROCOPTER FRANCE:** Amendment 39-17666; Docket No. FAA-2013-0487; Directorate Identifier 2010-SW-056-AD.

(a) Applicability

This AD applies to Eurocopter France (Eurocopter) Model AS332L2 and EC225LP helicopters, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as loss of tightening torque of a bolt that secures the front and rear main gearbox (MGB) suspension bar attaching fittings, which can change the loads on the frames and cause cracking. This condition could lead to failure of the MGB supporting structure, detachment of the MGB, and subsequent loss of control of the helicopter.

(c) Effective Date

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Actions

(1) Within 500 hours time-in-service (TIS), and thereafter at intervals not to exceed 825 hours TIS, inspect the tightening torque of each bolt that secures the front and rear MGB attaching fitting by using as reference Figure 1 of Eurocopter Alert Service Bulletin (ASB) No. 05.00.65, Revision 0, dated March 28, 2006, for the Model AS332L2 helicopters; and ASB No. 05A002, Revision 1, dated December 6, 2007, for the Model EC225LP helicopters.

(2) If the loss of tightening torque of a nut is less than or equal to 20 percent of the minimum tightening torque, before further flight, readjust the tightening torque.

(3) If the loss of tightening torque of any nut (front or rear) is greater than 20 percent of the minimum tightening torque, before further flight:

(i) Inspect each bolt and nut that secures the attachment fitting for a crack, and

(ii) Inspect for a crack in the attachment area of the attachment fitting, the attachment plate, and Frame 3855 for the front fitting and Frame 5295 for the rear fitting.

(A) If no crack exists, readjust the tightening torque.

(B) If there is a crack in any nut or bolt, before further flight, replace all four nuts and bolts of the affected attachment fitting.

(C) If there is a crack in the attachment area of the attachment fitting or the attachment plate, before further flight, replace the cracked attachment fitting or plate with an airworthy fitting or plate.

(D) If there is a crack in Frame 3855 for the front fitting or Frame 5295 for the rear fitting, before further flight, repair or replace the frame.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Gary Roach, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email gary.b.roach@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

(g) Additional Information

The subject of this AD is addressed in the European Aviation Safety Agency (EASA) AD No. 2006-0163 R1, dated December 13, 2007. You may view the EASA AD at <http://www.regulations.gov> in Docket No. FAA-2013-0487.

(h) Subject

Joint Aircraft Service Component (JASC) Code: 6330, Main Rotor Transmission Mount.

(i) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Eurocopter Alert Service Bulletin No. 05.00.65, Revision 0, dated March 28, 2006.

(ii) Eurocopter Alert Service Bulletin No. 05A002, Revision 1, dated December 6, 2007.

(3) For Eurocopter service information identified in this AD, contact American Eurocopter Corporation, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.eurocopter.com/techpub>.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Fort Worth, Texas, on November 5, 2013.

Lance T. Gant,

Acting Directorate Manager, Rotorcraft Directorate,
Aircraft Certification Service.

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11/25/2013]